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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/026,427

12/27/2001

Sang-Ho Choi

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12/15/2004

JACOBSON HOLMAN, PLLC.
PROFESSIONAL LIMITED LIABILITY COMPANY
400 SEVENTH STREET, N.W.
WASHINGTON, DC 20004

EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,427

Applicant(s)

CHOI ET AL.

Examiner

Shick C Hom

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/27/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. Figures 1-2 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2666

Claim Objections

3. Claims 1-3 objected to because of the following informalities: In claims 1-3 delete all parenthesis and replace with commas because limitations within the parenthesis not consider as claimed limitations. Appropriate correction is required.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 3-4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of Application No. 10/026,620. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

For claims 1, 3-4, the claims 1, 3-4 of copending application 10/026,620 discloses a method for performing an intra-packet data service node (PDSN) soft handoff, comprising

Art Unit: 2666

the steps of: (a) setting up a channel passing through a target base station controller (T-BSC), a source base station controller (S-BSC) and a PDSN by establishing a direct channel link between the S-BSC and the T-BSC in an active packet session mode; (b) performing a handoff between the S-BSC, the T-BSC and a mobile station (MS); (c) transmitting or receiving user packet data exchanged between the MS, and the S-BSC and the T-BSC to or from the PDSN through the established channel link; and (d) sending or receiving user packet data exchanged between the MS and the T-BSC to or from the PDSN through the established channel link when the handoff is completed (see claim 1);

wherein, in the step (c), one of packet data transmitted from the MS to the PDSN through the S-BSC and the T-BSC is selected and transmitted to a wireless packet data service network (see claim 3); and

wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC (see claim 4).

For claims 1, 3-4, claims 1, 3-4 of copending application number 10/026,620 disclose all the subject matter of the claimed invention with the exception of the packet data service node (PDSN) being the source-PDSN (S-PDSN) (claims 1, 3-4 of the copending application 10/026,620 do not recite the PDSN being the source). However, claim 1 recite both transmitting or receiving packet data to or from the PDSN clearly indicate that it would be obvious to the person of ordinary skill in the art at the time of the invention to replace the PDSN unit as taught by the copending application with the S-PDSN. The motivation for providing the S-PDSN in the method of claim 1 of copending application 10/026,620 being that it provide the source of packet data, i.e. transmits packet data to the mobile station.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. .

Art Unit: 2666

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Madour (2002/0021681).

Regarding claim 1:

Madour discloses the method for performing an inter-packet data service node (PDSN) soft handoff (see paragraphs 0032 and 0038-0039 which recite the improved cdma2000 inter-PDSN handoff method wherein the new connection is made first before breaking the previous connection, respectively), comprising the steps of: (a) setting up a channel passing through a target base station controller (T-BSC), a source base station controller (S-BSC) and a source-PDSN (S-PDSN) by establishing a direct channel link between the S-BSC and the T-BSC in an active packet session mode (see paragraph 0006 which recite the traffic path set up during handoff including the base station controller and PDSN and Fig.

Art Unit: 2666

2 which shows the link through S-BSC, T-BSC, and PDSN 27, which corresponds to the S-PDSN); (b) performing a handoff between the S-BSC, the T-BSC and a mobile station (MS) (see paragraph 0021 which recite the BSC-S and BSC-T that the MS will be handed off to); (c) transmitting or receiving user packet data exchanged between the MS, and the S-BSC and the T-BSC to or from the S-PDSN through the established channel link (see paragraph 0010 which recite data traffic being received by the PDSN from the MS); and (d) sending or receiving user packet data exchanged between the MS and the T-BSC to or from the S-PDSN through the established channel link when the handoff is completed (see paragraphs 0037-0040 which recite sending data to the MS when handoff is complete from the PDSN).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2666

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (2002/0021681) in view of Lee et al. (6,731,948).

Regarding claim 4:

For claim 4, Madour discloses the method described in paragraph 7 of this office action. Madour discloses all the subject matter of the claimed invention with the exception of wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC as in claim 4.

Lee et al. from the same or similar fields of endeavor teach that it is known to provide the channel link established

Art Unit: 2666

between the S-BSC and the T-BSC being an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC (see col. 3 lines 3-27 which recite use of the A3 and A7 interface for signal exchange between target BS and source BS). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the channel link established between the S-BSC and the T-BSC being an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC as taught by Lee et al. in the handoff method of Madour. The channel link established between the S-BSC and the T-BSC being an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC can be implemented by using the standard A3 and A7 interfaces of Lee et al. in interface of Madour. The motivation for using standard A3, A7 interfaces as taught by Lee et al. in the method of Madour being that it provides more efficiency for the system design.

Allowable Subject Matter

11. Claim 2 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2666

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang discloses a method for providing concurrent service handoff in a mobile communication system.

Barna et al. disclose a system and method of monitoring and reporting accounting data based on volume.

Choi et al. disclose a handoff method in CDMA communication system.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANTON
PRIMARY EXAMINER